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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,245	03/02/2004	Wolfgang Held	028987.53209US	9893

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EXAMINER
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NGUYEN, TU MINH

ART UNIT	PAPER NUMBER
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3748

MAIL DATE	DELIVERY MODE
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07/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/790,245	<b>Applicant(s)</b> HELD ET AL.	
	<b>Examiner</b> TU M. NGUYEN	<b>Art Unit</b> 3748	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. An Applicant's Request for Continued Examination (RCE) and an Applicant's Amendment filed on May 6, 2008 have been entered. Claims 1 and 5 have been amended. Overall, claims 1-7 are pending in this application.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim (U.S. Patent 5,921,081).**

Re claim 1, as shown in Figures 1-2, Kim discloses a method of controlling exhaust flaps in a vehicle exhaust system comprising triggering a solenoid valve (3) by an engine control unit (2) to open or close the exhaust flaps (60) as a function of at least one stored engine characteristics map which includes the rotational speed (see lines 55-61 of column 1), engine load, the gear engaged and optionally additional control variables for selectively increasing and muffling exhaust sound produced over all ranges of engine running conditions based on power and torque (see lines 12-25 of column 3).

Re claims 2 and 3, in the method of Kim, the at least one appropriate engine characteristics map is selected in the control unit from the stored engine characteristics maps depending on a preselectable criteria (see lines 55-61 of column 1).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim as applied to claim 3 above.**

The method of Kim discloses the invention as cited above, however, fails to disclose that the selected appropriate engine characteristics map is configured to provide switching between operation of the vehicle as a street vehicle and as a racecar.

As indicated on lines 55-61 of column 1, Kim opens or closes the exhaust flaps (60) based on at least an engine speed. It is obvious to one with ordinary skill in the art that a vehicle operating under a relatively low engine speed is being driven on a city street; and that a vehicle operating under a high engine speed is being driven on a racing circuit.

**6. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Tanaka et al. (U.S. Patent 5,911,681).**

Re claim 5, as depicted in Figures 1-2, Kim discloses an exhaust system, comprising:

- triggerable exhaust flaps (60),
- a triggerable solenoid valve (3), wherein the solenoid valve is triggerable to open and close the exhaust flaps as a function of at least one stored engine characteristics map which includes the rotational speed (see lines 55-61 of column 1), engine load and the engaged gear and optionally additional control variables for selectively increasing and muffling exhaust sound produced over all ranges of engine running states based on power and torque (see lines 12-25 of column 3).

Kim, however, fails to disclose that the exhaust flaps are also operated by a vacuum type transmission mechanism.

As shown in Figures 1-2, Tanaka et al. disclose an exhaust gas purification apparatus for an internal combustion engine, comprising a hydrocarbon adsorbent (42) located in a bypass path (A). Tanaka et al. teach that it is conventional in the art to utilize a vacuum type transmission mechanism to operate exhaust flaps (40) in order to control the opening and closing of the bypass path, wherein the mechanism includes a vacuum storage device (41) operatively connected via a nonreturn valve (6) to an intake system (11) and to an exhaust system (8) via a triggerable solenoid valve (VSV) in parallel. Tanaka et al. also teach that their apparatus is also useful to reduce engine torque fluctuation when starting the engine from a cold condition. As indicated on lines 43-56 of column 10, lines 12-18 of column 9, and lines 7-32 of column 11, when the engine in Tanaka et al. is started in cold condition (i.e., low engine load and low exhaust or catalyst temperature), the solenoid valve (VSV) is activated to allow the vacuum in the intake system to close flow a main path B, open bypass path A, and close an exhaust valve (10) to prevent exhaust gas recirculation back to the engine in order to minimize an engine torque fluctuation and to

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prevent engine stalling due to combustion instability. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the vacuum type transmission mechanism taught by Tanaka et al. in the system of Kim, since the use thereof would have been routinely practiced by those with ordinary skill in the art to effectively control the operation of an exhaust flap.

Re claim 6, in the modified system of Kim, the at least one appropriate engine characteristics map is selected in the control unit from the stored engine characteristics maps depending on a preselectable criteria (see lines 55-61 of column 1).

Re claim 7, the modified system of Kim discloses the invention as cited above, however, fails to disclose that the selected appropriate engine characteristics map is configured to provide switching between operation of the vehicle as a street vehicle and as a racecar.

As indicated on lines 55-61 of column 1, Kim opens or closes the exhaust flaps (60) based on at least an engine speed. It is obvious to one with ordinary skill in the art that a vehicle operating under a relatively low engine speed is being driven on a city street; and that a vehicle operating under a high engine speed is being driven on a racing circuit.

### ***Response to Arguments***

7. Applicant's arguments with respect to the references applied in the previous Office Action have been fully considered but they are moot in view of the new ground(s) of rejection.

***Prior Art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of three patents: Koenig (U.S. Patent 6,584,767), Abram et al. (U.S. Patent 7,155,333), and Bozmoski et al. (U.S. Patent 7,347,045) further disclose a state of the art.

***Communication***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMN  
July 20, 2008

/Tu M. Nguyen/  
Tu M. Nguyen  
Primary Examiner  
Art Unit 3748